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Jim Zolniersek and Torsten Clausen  
Illinois Commerce Commission

*Submitted via email: jim.zolniersek@illinois.gov/torsten.clausen@illinois.gov*

**RE: ICC Energy Program Workshop: Comments – Meeting of January 27<sup>th</sup>, 2022**

As noted in previous comments filed with the Illinois Commerce Commission (ICC), Enel supports the development of a framework to identify and measure the potential costs, benefits, that deployment of energy storage could produce as well as the barriers to realizing such benefits. Through participation in the design of energy storage programs and market enablement in several US states and Canadian provinces, Enel has recognized challenges and opportunities to enable energy storage's deployment. Programs and procurements, such as Connected Solutions in Massachusetts, and the Non-Wire Solution procurements of ConEdison have driven the deployment of energy storage, and other flexible resources to provide value to both the distribution and transmission grids, among other benefits. The success of these programs has occurred due to the reduction of barriers. Enel supports the inclusion of the need to identify barriers at the start of discussions on an energy storage framework.

For 20 years Enel North America has been a renewable energy leader and innovator in the United States and Canada. Our goal is to help companies and consumers find value in sustainability. Through Enel Green Power, Enel X and Energy Management and Commodities, Enel is driving toward a decarbonized future. Currently Enel has successfully developed over 70 behind-the-meter energy storage system projects, the largest non-wire alternative project in New York City<sup>1</sup>, and now Lily Solar + Storage<sup>2</sup> in Texas, Enel Green's Power's first utility-scale solar and storage project.

Enel recommends the ICC staff review the following barriers which if not treated correctly will limit the deployment of energy storage in a cost effective and efficient manner.

**1. Need for a price signal at the utility level/retail level and/or program**

- The largest barrier to the deployment of energy storage is the lack of a utility-level/retail-level price signal for storage to discharge during utility/customer peak conditions and/or to reduce transmission and distribution costs, avoid GHG emissions and wholesale costs, to name a few.
- Jurisdictions that have seen a proliferation of storage have put in place price signals and innovative retail rate designs (Ontario, MA, CT, NY)
- Reliance only on wholesale, capacity, energy and ancillary services cost (PJM) at this time will limit the deployment of energy storage.

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<sup>1</sup> <https://corporate.enelx.com/en/stories/2019/12/storage-system-energy-gateway-center>

<sup>2</sup> <https://www.enelgreenpower.com/our-projects/under-construction/lily-solar-storage-project>



## **2. Right regulatory environment:**

- The right regulatory environment needs to exist for utilities to be agnostic to the CapEx/OpEx issue.
- Utilities will not seek third-party participation in non-wire solutions versus a traditional wires solution, if the right incentives do not exist. Utility incentives need to align with a positive customer outcome.
- Utility ownership is not required to have energy storage provide reliable non-wires solutions. Contractual agreements between utilities and third parties define when non-wire solutions will need to be available for dispatch and contain meaningful penalties for non-performance.

## **3. Ability for dual participation**

- Assets participating in utility programs also should be able to participate in wholesale markets. Participation in multiple programs/markets has several advantages:
  - o Revenues from wholesale participation can reduce the cost of a non-wire solution for a utility
  - o Both distribution level savings and wholesale level savings can be provided to all customers
  - o From a reliability perspective, the wholesale grid operator should have operational visibility into the assets participating in the non-wire solution/program
- When assets, such as storage, are dispatched by utilities, project owners can reflect that in their wholesale market offers.

## **4. Proper Cost-Benefit Analysis**

- As indicated in Enel comments submitted to the ICC Energy Storage Program Workshop (January 14<sup>th</sup>, 2022), when evaluating energy storage and potential non-wire solutions for utilities and performing a benefit-cost analysis, the regulator/utility/independent third party must think comprehensively and include all potential benefit streams.
- Enel recommends reviewing Con Edison's 2026 Avoided Cost Model that includes avoided capacity (bulk system benefits), avoided energy, net avoided CO<sub>2</sub>, avoided distribution costs, and avoided line losses.<sup>3</sup>

## **5. Measurement and verification**

- As noted in the presentation by Sunrun at the January 20<sup>th</sup>, 2022 Energy Storage Program Workshop, participation in programs, such as Bring Your Own Device, can be settled after-the-fact weekly, monthly and/or following an event.
- Data in real time, and therefore expensive metering and telemetry, is not required for programs to be successful.

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<sup>3</sup> Con Edison's 2026 Avoided Cost Model, September 27th, 2019 Docket 14-#-0302



### Avoided Cost Model

	Net Present Value of Avoided Cost Streams
<b>Potential Savings / Avoidance (Costs are already Escalated)</b>	
Avoided Capacity (NYC) - Bulk System Benefits	\$63.62
Avoided Energy (NYC)	\$100.22
Net Avoided CO2	\$34.18
Avoided Distribution Costs	\$47.60
Avoided Line Loss	\$11.77
<b>Total (\$M)</b>	<b>\$257.39</b>

#### 6. Reasonable interconnection standards and timelines

- Interconnections standards should be standardized and the prescriptive requirements should meet the requirements of need of front-of-the-meter and behind-the-meter resources including recognizing the difference between injection and non-injection resources, and resource size.
- California's Rule 21 interconnection regulation reform process provides an example of a proceeding that reviewed barriers to deployment of resources based on interconnection challenges identified, including streamlining the process, telemetry requirements, cost allocation and smart inverter functions<sup>4</sup>.

Enel looks forward to its continued participation in the Energy Storage Workshop at the ICC. Please follow up with any questions or if further information required.

Yours truly,

Sarah Griffiths  
Enel North America

[sarah.griffiths@enel.com](mailto:sarah.griffiths@enel.com)  
(416) 697-3744

<sup>4</sup> <https://www.cpuc.ca.gov/Rule21/>